

Claims

1. An Arterivirus replicon having at least some of its original arteriviral nucleic acid encoding ORF-7 deleted.
- 5 2. A replicon according to claim 1 capable of *in vivo* RNA replication.
3. A replicon according to claim 1 or 2 further comprising nucleic acid derived from at least one heterologous micro-organism.
4. A replicon according to anyone of claims 1 to 3 wherein said replicon comprises a RNA transcript of an infectious copy cDNA.
- 10 5. A replicon according to anyone of claims 1 to 4 at least equipped with a functional kissing loop interaction essential for said replication.
6. A replicon according to anyone of claims 1 to 5 encoding a C-terminally truncated ORF-7 polypeptide.
7. A replicon according to claim 6 wherein said truncation does not effect the
15 production of viable virus.
8. A replicon according to anyone of claims 1 to 7 wherein said Aterivirus comprises a porcine reproductive and respiratory syndrome virus (PRRSV)
9. A replicon according to claim 8 comprising a nucleic acid modification leading to an at most 6 amino acid truncation of ORF-7.
- 20 10. A replicon according to claim 8 comprising a nucleic acid modification of a 34-nucleotide stretch in ORF-7 from position 14653-14686 and a nucleic acid modification of the 3'-UTR from position 14996-15034.
11. A replicon according to anyone of claims 3-10 wherein said heterologous micro-organism comprises a pathogen.
- 25 12. A replicon according to claim 11 wherein said pathogen is a virus.
13. Use of a replicon according to anyone of claims 1-12 for obtaining a vaccine.
14. A vaccine comprising a replicon according to anyone of claims 1-12.
15. Use of a vaccine according to claim 14 for vaccinating animals.